# The Pump Handle The Pump Handle



"I had an interview with the Board of Guardians of St. James's parish, on the evening of Thursday, 7th September, and represented the above circumstances to them. In consequence of what I said, the handle of the pump was removed on the following day."

John Snow, 1855

# September 2003 Topics

- An Adverse Reaction To Tetanus Vaccine
- Sufficient Influenza Vaccine Supply For Upcoming Season
- Prevention of Perinatal Group B Streptococcus
- *E. coli* Happens
- West Nile Virus Update



### An Adverse Reaction To Tetanus Vaccine

The North Dakota Department of Health was notified in July, 2003 of an adult having a severe reaction to the adult tetanus-diphtheria toxoid vaccine. This person had received two tetanus vaccinations less than one year apart. The adverse reaction included:

- Flu-like symptoms
- Pain in the right hand and arm
- Trouble breathing
- Arm pain
- Jaw aches
- Left leg pain
- Body aches
- Loss of dexterities in both hands

- Numbness and tingling in arms and legs
- Lower back pain
- Loss of memory
- Vertigo symptoms
- Some hyperacusis
- Intermittent muscle spasms in the throat with difficulty swallowing

The patient was hospitalized and later was transferred to a rehabilitation unit for physical therapy. The patient did not recall having been immunized for tetanus the year prior. This case is a lesson to all providers that before immunizations are given, the patient's

immunization history should be verified. Information provided by the patient is often incorrect.

Providers are encouraged to enter all administered immunizations into the North Dakota Infant Immunization System (NDIIS). Both childhood and adult immunizations can be entered into the registry. Contact Heather Weaver or Molly Sander of the NDDoH at 800.472.2180 for information regarding the immunization registry

All vaccine adverse events should be reported to the Vaccine Adverse Events Reporting System (VAERS). VAERS online reporting is available by clicking here.



### Sufficient Influenza Vaccine Supply For Upcoming Season

Vaccine for the upcoming influenza season will be available in October and supplies are expected to be sufficient for everyone that wants to be vaccinated.

The trivalent influenza vaccine for the 2003-2004 season contains the same type A subtype antigens and type B component as last year's vaccine. These include A/New Caledonia/20/99-like (H1N1), A/Moscow/10/99-like (H3N2) and B/Hong Kong/330/2001-like viruses. The Centers for Disease Control and Prevention (CDC) estimates that the three influenza vaccine manufacturers licensed to produce vaccine for the United States, Aventis Pasteur, Powderject Vaccines and Medimmune, will produce 86.5 to 93 million doses for the 2003-2004 influenza season. This amount exceeds the 79 million doses sold to individuals in 2002.

Although the vaccine strains are the same, vaccine from the 2002-2003 influenza season expired June 30, 2003 and should not be used during the 2003-2004 influenza season.

The CDC recommends that individuals most in need of influenza vaccination include those 65-years old and older, those with chronic, long-term health problems such as heart or lung disease, kidney problems, diabetes, asthma, anemia, HIV/AIDS or any other illness that suppress the immune system. Vaccination is also recommended for people age 50 to 64 years in addition to healthcare workers, and close contacts of individuals in high-risk groups. Anyone who wants to reduce their risk of getting the flu should be immunized. An annual influenza vaccination is required to provide protection.

Information about influenza vaccination services, free influenza campaign materials, sentinel providers and surveillance activities performed by the NDDoH is available by clicking here. Contact Melissa Casteel, influenza surveillance coordinator, at 800.472.2180 or email her with any questions.



### Prevention of Perinatal Group B Streptococcus

Guidelines for prevention of perinatal Group B Streptococcus (GBS) disease were amended in 2002 by the CDC. Significant revisions from the guidelines published in 1996 include:

universal prenatal screening for vaginal and rectal GBS colonization is recommended for of all pregnant women at 35 - 37 weeks' gestation (Figure 1);

- prophylactic treatment with clindamycin or erythromycin for women at high risk of anaphylaxis due to penicillin allergy and cefazolin for women allergic to penicillin but not at high risk for anaphylaxis;
   (Figure 2);
- expanded instruction on collection and processing of prenatal clinical specimens and susceptibility testing for clindamycin and erythromycin when ordered for penicillin allergic-patients;
- recommendation against routine intrapartum antibiotic prophylaxis (IAP) for GBScolonized women undergoing planned cesarean deliveries who have not begun labor or had rupture of membranes;
- algorithms for management of patients with threatened preterm delivery; and management of newborns exposed to IAP (Figure 3, Figure 4).

More information about the new guidelines for prevention of perinatal Group B Streptococcal disease is located on the CDC <u>website</u>. All streptococcal infections isolated from invasive sites are reportable to the NDDoH.



### E. coli Happens

Quality Meats and Seafood of West Fargo, North Dakota voluntarily recalled over 600,000 pounds of fresh and frozen ground beef products after an epidemiological investigation conducted by the NDDoH implicated ground beef packaged at their facility was linked to an *E. coli* O157.H7 illness in North Dakota. The contaminated meat was submitted for testing by a Burleigh county resident who was diagnosed with *E. coli* O157:H7 infection.

The individual presented to an emergency room on July 17 complaining of diarrhea, abdominal cramps and bloody stools. The patient reported eating undercooked hamburger patties and submitted the package of patties to the NDDoH for testing at the Division of Microbiology. Both the patient's stool sample and hamburger patties tested positive for *E. coli* O157:H7. Results of pulsed field gel electrophoresis testing conducted by the Division of Microbiology indicated the isolates were identical. The patient was not hospitalized and recovered without complications.

The patient's roommate and a visitor, who had also consumed meat from the same UPC coded package of hamburger patties, reported similar symptoms. Neither of the suspect cases submitted stool samples for testing to confirm *E. coli* O157:H7 infection.



# West Nile Virus Update

As of September 26, 2003, the North Dakota Department of Health reports the following:

- One hundred and forty-nine horses have been tested for arboviral encephalitis and 41 horses have tested positive for West Nile Virus (WNV).
- To date, six *Culex tarsalis* pools of 65 tested pools have tested positive for WNV.

- To date, 769 birds have been collected and sent to the NDSU Veterinary Diagnostic Laboratory in Fargo, N.D., for WNV testing. Of those, 188 birds have tested positive for WNV.
- To date, 2,125 human samples have been sent to the Division of Microbiology for arboviral testing. As of September 11, 2003, 497 human cases of WNV have been reported to the NDDoH. For more information see the press release posted on the NDDoH's WNV website. All serum specimens were negative for WEE, EEE, SLE, and CA.

State and county-specific surveillance results, mosquito trap information, program partners, fact sheets and general information are posted on the <u>website</u>.

Questions regarding WNV may be directed to Tracy Miller, epidemiology and surveillance program manager, at 701.328.2378 or <u>email</u> her.

Contributing authors of The Pump Handle include Molly Sander, Julie Goplin, Tracy Miller, Kirby Kruger and Larry Shireley. For questions, suggestions or inquiries, or to be removed from the mailing list, please contact Julie Goplin of the Division of Disease Control at 701.238.2375 or by email.

The pump handle picture in the title was obtained from this website.



## North Dakota Department of Health Division of Disease Control

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